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ı	APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
٦	10/020,653	10/30/2001	Harold Randolph Anderson	0523-1-1	1045
	;	7590 08/13/2003			
				EXAMINER	
	Embassy Row	400, Suite 495		LITHGOW, 1	THOMAS M
				ART UNIT	PAPER NUMBER
	7111011111, 017	10/020,653 10/30/2001	*	1724	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No	Applicant(s)
•		
Office Action Summary	10/020,653	ANDERSON ET AL.
Office Action Summary	Examiner	Art Unit
The MAILING DATE of this comm	Thomas M. Lith	gow 1724 er sheet with the correspondence address
Period for Reply	ameadon appears on the cov	an sneet war are correspondence address
A SHORTENED STATUTORY PERIOD THE MAILING DATE OF THIS COMMU  - Extensions of time may be available under the provisit after SIX (6) MONTHS from the mailing date of this co  - If the period for reply specified above, the maximum  - Failure to reply within the set or extended period for re Any reply received by the Office later than three month earned patent term adjustment. See 37 CFR 1.704(b)  Status	NICATION.  ons of 37 CFR 1.136(a). In no event, how mmunication.  (30) days, a reply within the statutory m statutory period will apply and will expir ply will, by statute, cause the application is after the mailing date of this communic	wever, may a reply be timely filed inimum of thirty (30) days will be considered timely. e SIX (6) MONTTM from the mailing date of this communication. to become ABANDONED (35 U.S.C. § 133).
1) Responsive to communication (s)	filed on	
2a)☐ This action is FINAL.	2b)⊠ This action is non-	final.
Since this application is in condit closed in accordance with the property Disposition of Claims		formal matters, prosecution as to the merits is 9, 1935 C.D. 11, 453 O.G. 213.
4)⊠ Claim(s) 1-32 is/are pending in th	e application.	
4a) Of the above claim(s) none is/s	are withdrawn from consider	ation.
5) Claim(s) is/are allowed.		
6)⊠ Claim(s) <u>1-24 and 28-32</u> is/are rej	ected.	
7) Claim(s) 25-27 is/are objected to.		
8) Claim(s) are subject to rest	riction and/or election requir	ement.
Application Papers		· ·
9) The specification is objected to by	the Examiner.	
10)☐ The drawing(s) filed on is/ar	e: a)□ accepted or b)□ object	eted to by the Examiner.
i i i	• • • • • • • • • • • • • • • • • • • •	eld in abeyance. See 37 CFR 1.85(a).
11) ☐. The proposed drawing correction fi	led on is: a)□ approv	red b)☐ disapproved by the Examiner.
If approved, corrected drawings are	• •	ction.
12) The oath or declaration is objected	to by the Examiner.	
Priority under 35 U.S.C. §§ 119 and 120		
13) Acknowledgment is made of a cla	im for foreign priority under 3	35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of		
1. Certified copies of the priori	ty documents have been rec	eived.
2. Certified copies of the priori	ty documents have been rec	eived in Application No
	rnational Bureau (PCT Rule	
14) Acknowledgment is made of a claim	for domestic priority under	35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign I 15)☐ Acknowledgment is made of a clain		
Attachment(s)		
Notice of References Cited (PTO-892)     Notice of Draftsperson's Patent Drawing Review     Notice of Draftsperson's Patent Drawing Review     Notice of Draftsperson's Patent Drawing Review     Notice of References Cited (PTO-892)		Interview Summary (PTO-413) Paper No(s)  Notice of Informal Patent Application (PTO-152)  Other:
I.S. Patent and Trademark Office PTO-326 (Rev. 04-01)	Office Action Summary THO	MAS M. LITHGOW Part of Paper No. 5

Art Unit: 1724

## **DETAILED ACTION**

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35
 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claim 2 is rejected under 35 U.S.C. 102(b) as being anticipated by Manillo (US 5787537). Manillo '537 discloses a method for recycling laundry water which has a zero discharge (for water) as noted at col. 5, lines 1-5. Basically the Mannillo process is 100% recycle which meets the recitation of claim 2.

## Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Art Unit: 1724

4. Claims 1, 15, 17 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Manillo (US 5787537) in view of Pattee (US 6010621) and Thomas (US 4211652). Manillo '537 discloses a process for reclaiming waste water from a laundry operation and includes many unit operations including tanks, lint filter 20, sand filter 300, activated carbon filter 250, ozone generator 230, and a uv source 410 with pumps for controlling the process flows. Manillo lacks a "multimedia" filter and a clay filter. In Pattee '621, a process for the purification and recycling of laundry water is disclosed in which the organics are removed in a two step process including a clay filter 130 upstream of an activated carbon (AC) filter 140. This arrangement allows the AC filter to last longer as the clay filter removes an initial portion of the organics. To add a clay filter to the Manillo '537 process ahead of the AC filter (250) would have been obvious in view of the benefit of longer use times without backwashing (BW), Similarly, Manillo '537 employs a sand filter (300) – a single media filter to remove additional solids from the laundry waste water that the lint filter and flotation missed. Thomas '652 discloses that a multimedia filter 60 (anthracite over silica sand over garnet) is beneficial to removing solids from a laundry waste water stream subsequent to a flotation operation. Generally such

Art Unit: 1724

multimedia beds are much better at solids removals than it single media relative (sand filters) albeit at a higher capital cost. It would have been obvious to employ the more efficient multimedia filter of Thomas '652 for the single media (sand) filter of Manillo '537.

- 5. Claims 3,5,7-12 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Manillo (US 5787537) in view of Thomas (US 4211652). As above, the use f the more efficient multimedia filter of Thomas "652 for the single media sand filter of Manillo in the reclamation of laundry waste water would have been obvious to one of ordinary skill in the art.
- 6. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Manillo (US 5787537) as applied to claim 3 above, and further in view of Pattee (US 6010621). As noted before the use of a clay filter ahead of the AC filter (Pattee '621) is known to prolong the life of the AC filter and to use the more advanced two step process for organics removal from laundry waste water instead of the one step AC filter of Manillo would have been obvious to one of ordinary skill in the art.
- 7. Claims 4 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over the prior art as applied to claims 3 and 15 respectively above, and further in view of either one of Lahti (US 5807487) or Sharkey

Art Unit: 1724

(US 5350526). Either one of the two secondary patents disclose the use of a pressure bag filter for the removal of lint from a wash machine (laundry) operation. To use such a bag filter in place of the functionally equivalent lint filter 20 of Manillo '537 would have been obvious to one of ordinary skill in the art at the time of the invention.

- 8. Claims 6 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over the prior art as applied to claims 3 and 15 respectively above, and further in view of Smith (US 3738126). The use of a grooved spinning plate as a lint filter for the discharge of a washing machine is disclosed by Smith '126. To use the functionally equivalent disk filter for the lint filter of Manillo '537 would have been obvious to one of ordinary skill in the art.
- 9. Claims 1,3,5,7,11-13,20,22,24,and 28-32 rejected under 35
  U.S.C. 103(a) as being unpatentable over Pattee (US 6010621) further in view of Manillo (US 5787537). The use of a UV disinfecting step at the end of the laundry water recycling process to kill any remaining bacteria would have been obvious to one of ordinary skill in the art.
- 10. Claims 4 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over the prior art (Pattee '621) as applied to claims 3 and 20

Art Unit: 1724

respectively above, and further in view of either one of Lahti '487 or Sharkey '526. As noted above, the use of bag filters for a lint trap is well known.

11. Claims 6 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over the prior art (Pattee'621) as applied to claims 3 and 20 above, and further in view of Smith '126. As noted above, the use of a spinning disc as a lint filter is well known.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas M. Lithgow whose telephone number is 703-308-0173. The examiner can normally be reached on Mon. -Fri..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blain Copenheaver can be reached on 703-308-1261. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3602 for regular communications and 305-3599 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

Art Unit: 1724

Thomas M. Lithgow Primary Examiner Art Unit 1724

TML August 8, 2003